Please amend the specification as follows:

Please amend the paragraph at the bottom of page 4 as follows:

Advantages of the invention may include one or more of the following. The substrate temperature in forming a thin film is approximately that of room temperature, and the process requires a short time. Since the thin film is formed at a very low temperature during substantially the whole process, the process can be applied to a highly integrated device to deposit an additional layer with a plurality of elements without damaging other elements previously deposited using conventional deposition.

Please amend the sentence in the middle of page 6 as follows:

Fig. 3 shows one embodiment of an FTS unit.

Please amend the paragraph at the bottom of page 7 as follows:

An FTS unit is positioned to face the wafer 22 and has a plurality of magnets 102, 104, 106, and 108. A first target 110 is positioned between magnets 102 and 104, while a second target 120 is positioned between magnets 106 and 108. The first and second targets 110 and 120 define an electron confining region 130. A power supply 140 is connected to the magnets 102-108 and targets 110-120 so that positive charges are attracted to the second target 120. During operation, particles are sputtered onto a substrate 22 ~~150~~ which, in one embodiment where the targets 110 and 120 are laterally positioned, is vertically positioned relative to the lateral targets 110 and 120. The substrate 22 ~~150~~ is arranged to be perpendicular to the planes of the targets 110 and 120. A substrate holder 24 ~~152~~ supports the substrate 22 ~~150~~.

Please amend the sentence in the middle of page 8 as follows:

The targets 110 and 120 are positioned in the reactor 10 in such a manner that two rectangular shape cathode targets face each other so as to define the plasma confining region 130 therebetween. Magnetic fields are then generated to cover vertically the outside of the space between facing target planes by the arrangement of magnets installed in touch with the backside planes of facing targets 110 and 120. The facing targets 110 and 120 are used as a cathode, and the shield plates are used as an anode, and the cathode/anode are connected to output terminals of the direct current (DC) power supply 140. The vacuum vessel and the shield plates are also connected to the anode.

Please amend the sentence at the bottom of page 9 as follows:

The presence of the large positively biased shield affects the plasma, particularly the plasma close to the pedestal electrode 24. As a result, the DC self-bias developed on the pedestal 24, particularly by an RF bias source, may be more positive than that for the conventional large grounded shield, that is, less negative since the DC self-bias is negative in typical applications. It is believed that the change in DC self-bias arises from the fact that the positively biased shield drains electrons from the plasma, thereby causing the plasma and hence the pedestal electrode to become more positive.

Please amend the sentence at the bottom of page 12 as follows:

The system of Fig. 4B gets linear motion of the wafer 502 past the three sources for uniform deposition. This is done through a chuck supported from underneath rather than from the side. A jointed pendulum supports the wafer and keeps the wafer at a constant vertical distance from the target as the pendulum swings. The system swings the wafer using a pendulum. The system is more stable than a system with a lateral linear arm since the chuck 500

is heavy and supports the weight of the wafer, a heater, and RF back-bias circuitry and would require a very thick support arm otherwise the arm would wobble. Also, the linear arm would need to extend away from the source, resulting in large equipment. In this implementation, the arm sits below the chuck, resulting in a smaller piece of equipment and also the arm does not have to support much weight.

Please amend the claims as follows:

1. (Currently Amended) A facing targets sputtering device for semiconductor fabrication, comprising:

an air-tight chamber in which an inert gas is admittable and exhaustible;

a pair of target plates placed at opposite ends of said air-tight chamber respectively so as to face each other and form a plasma region therebetween;

a pair of magnets respectively disposed adjacent to said target plates such that magnet poles of different polarities face each other across said plasma region thereby to establish a magnetic field of said plasma region between said target plates;

a substrate holder disposed adjacent to said plasma region, said substrate holder adapted to hold a substrate on which an alloyed thin film is to be deposited;

a chuck heater mounted above the wafer; and

a back-bias power supply coupled to the substrate holder.

2. (Original) A facing targets sputtering device according to claim 1, wherein the back-bias power supply is a DC or an AC electric power source.

3. (Original) A facing targets sputtering device according to claim 1, further comprising a first target power supply coupled to one of the target plates.

4. (Original) A facing targets sputtering device according to claim 3, wherein the first target power supply is a DC or an AC electric power source.

5. (Original) A facing targets sputtering device according to claim 1, further comprising a second target power supply coupled to one of the ~~remaining~~ target plates.

6. (Original) A facing targets sputtering device according to claim 5 ~~1~~, wherein the first and second target power supplies comprises DC and AC electric power sources.

7. (Original)A facing targets sputtering device according to claim 1, further comprising a robot arm to move the wafer.

8. (Original) A facing targets sputtering device according to claim 1, further comprising a magnetron coupled to the chamber.

9. (Withdrawn) A facing targets sputtering device according to claim 1, further comprising a chuck heater mounted above the wafer.

10. (Currently Amended) The facing targets sputtering device ~~apparatus~~ of claim 1, ~~wherein the FTS further comprises~~ comprising first and second targets mounted in parallel.

11. (Currently Amended) The facing targets sputtering device ~~apparatus~~ of claim 10, further comprising magnets positioned between the first and second targets.

12. (Currently Amended) The facing targets sputtering device ~~apparatus~~ of claim 10, further comprising a power supply coupled to the magnets and the targets.

13. (Currently Amended) The facing targets sputtering device ~~apparatus~~ of claim 10, wherein the substrate is ~~are~~ positioned perpendicularly to the planes of the targets.

14. (Withdrawn) The facing targets sputtering device ~~apparatus~~ of claim 13, further comprising a substrate holder to secure the substrate.

15. (Currently Amended) The facing targets sputtering device ~~apparatus~~ of claim 1, wherein the substrate comprises a semiconductor layer ~~is a CMOS layer~~.

16. (Currently Amended) A method for sputtering a thin film onto a substrate, comprising:

providing at least one target and a substrate having a film-forming surface portion and a back portion;

creating a magnetic field so that the film-forming surface portion is placed in the magnetic field with the magnetic field induced normal to the substrate surface portion

back-biasing the back portion of the substrate;

swinging the wafer using a pendulum; and

sputtering material onto the film-forming surface portion.

17. (Original) A method as in claim 16 including providing a pair of said targets opposed to each other where the substrate is disposed between the targets.

18. (Withdrawn) A method as in claim 16, further comprising swinging the wafer using a pendulum.

19. (Original) A method as in claim 16, further comprising supporting a chuck from underneath rather than side-way.

20. (Original) A method as in claim 16, further comprising providing a plurality of sources to deposit materials onto the substrate.